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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/606,074
Filing Date: June 25, 2003
Appellant(s): WEINER, ROBERT S.

Stephen J. Stark
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 3 July 2008 appealing from the Office action mailed 14 February 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct except with respect to the withdrawn rejection below.

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. The rejection of Claim 10 under 35 USC 103(a) over Weaver (US 3,923,941) in view of Reed (US 3,264,385) is withdrawn.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

1,730,673	MELL	10-1929
2,867,263	BARTLETT	1-1959
3,923,941	WEAVER	12-1975
4,349,597	FINE et al.	9-1982
6,589,631	SUZUKI et al.	7-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

Claims 1, 4-6, and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Weaver (USPN 3923941).

As to Claim 1, Weaver teaches a method of creating a vinyl sheet product (3:59, 3:65-67, 2:5-24) comprising the steps of:

depositing a design material (2:45-64) onto a conveyor (9), said design material in the form of one of drips, streams (2:49, 2:60-63), chips and pellets deposited so as to not completely cover a top surface of the conveyor where applied (the balls, 8, are inherently smaller than the width of the substrate);

applying a first vinyl substrate layer of a predetermined height over on the conveyor over the design to create a vinyl sheet product, at least a portion of the design material remaining in contact with the conveyor (Fig. 1, item 22, 3:42-60); and

curing the vinyl sheet product, wherein when the vinyl sheet product is removed from the conveyor, the design material forms an indicia relative to the first vinyl substrate layer (3:58-60, Fig. 1, item 23). Removal of the article from the conveyor (Fig. 1, item 25) is interpreted to be an inverting, and in the alternative, inverting would have been obvious in cutting, packaging, and shipping.

Although Weaver does not explicitly disclose “curing” or that the design material does not cover the top surface of the conveyor completely, it is submitted that these aspects are inherent in that the material is “gelled” (3:40-41), which is interpreted to be the claimed curing step, and because the fluid applicators are used in tandem (2:60-68) which would not cover the entire substrate. However, in the alternative, it is submitted that it would be obvious that the plastisol materials would cure in the heating means, and that the amount and distribution of the design material is a result effective variable which influences the character of the marbledized sheet (2:52-55 and 3:12-20). Thus, it would have been prima facie obvious to adjust the amount of material applied or its distribution so as not to completely cover a top surface of the conveyor where applied. As to **Claim 4**, the design material of Weaver is a fluid (2:68), which is

interpreted to be a liquid, and is deposited directly onto the conveyor (9). **As to Claim 5**, the fluid design material is gelled in heating means 20 (3:39-41). **As to Claim 6**, in view of the fact that Weaver's material is heterogeneous (2:51-52), it would have been inherent that at least two distinct colors of fluid design material were applied, including at least colored and translucent (2:8). In the alternative, it would have been obvious to provide multiple colors to achieve the desired goal of producing a marbled sheet. **As to Claim 13**, it is submitted that cooling from the gelling temperature would have been inherent in that the article is subsequently used. In the alternative, it would have been obvious to cool the sheet to allow faster processing.

Claim Rejections - 35 USC § 103

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver (USPN 3923941) in view of Bartlett (USPN 2867263) and Fine (USPN 4349597). Weaver teaches the subject matter of Claim 1 above under 35 USC 102(b), or in the alternative, under 35 USC 103(a).

As to Claims 2 and 3, Weaver a first vinyl layer but is silent to a second vinyl layer and scrim. However, Bartlett teaches that it is known to provide additional vinyl chloride layers or a reinforcing fabric (4:1-10) to a first colored layer of vinyl. Fine teaches additionally that it is known to provide a first polymeric layer, heat to a tacky state, apply a reinforcing fabric (scrim) to the tacky layer, and impregnate the fabric with a second polymeric layer, and subsequently gelling the layers (Abstract, second paragraph). One of ordinary skill in the art could have combined the method of Fine comprising a scrim and second vinyl layer to the first vinyl layer of

Weaver in view of Barlett's suggestion to one skilled in the art that further reinforcement is needed for a gelled vinylchloride polymer.

Claims 7-9 are rejected under 35 U.S.C. 103(a) as obvious over Weaver (USPN 3923941) in view of Mell (USPN 1730673). Weaver teaches the subject matter of Claim 4 above under 35 USC 102(b), or in the alternative, under 35 USC 103(a).

As to Claims 7-9, Weaver teaches a hopper and lateral reciprocation while depositing the material to the conveyor (Figures, 2:60-65). However, Weaver is silent to the multiple nozzles or orifices. However, Mell teaches that it would have been obvious to provide multiple orifices to apply the liquid design material (Fig. 1). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Mell into that of Weaver because Mell provides a tandem pattern, which Weaver suggests (2:60).

Claim 14 is rejected under 35 U.S.C. 103(a) as obvious over Weaver (USPN 3923941) in view of Suzuki (USPN 6589631). Weaver teaches the subject matter of Claim 1 above under 35 USC 102(b), or in the alternative, under 35 USC 103(a).

As to Claim 14, Weaver is silent to the conveyor having at least two different heights. However, Suzuki teaches a process for making vinyl floor covering using a conveyor texture to transfer a desired pattern to a floor covering. It is submitted that the Suzuki process has at least two different heights (Figs. 45-47). One of ordinary skill could have combined the process of Suzuki with that of Weaver by providing a texture to the carrier of Weaver to provide the

expected result that the Weaver process would produce an article having a texture to improve the aesthetic or functional aspects of the Weaver article.

(10) Response to Argument

Argument A

Appellant argues that Claim 1 excludes the possibility of applying a design material with a roller ball as done in Weaver since the design material is one of drips, streams, chips, or pellets (App. Br. 4). Appellant further argues that Weaver rolls a coating onto a substrate (*Id.*). Appellant further argues that Weaver consistently refers to layer 21 as the top layer, but that Claim 1 requires the deposited layer to form the upper surface in an installation (App. Br. 4-5). Appellant further argues that there is no teaching to make layer 21 function as the bottom layer (App. Br. 5). With respect to Claim 4, Appellant argues that Weaver shows a conveyor as item 14, and that no deposition occurs on the conveyor.

Response A

The Weaver reference is applied to meet the limitation of "depositing a design material...in the form of ...streams". See Claim 1. Appellant suggests a narrow interpretation of "streams" which excludes the flow from multiple fluid applicators of Weaver (Weaver col. 3, ll. 19-21; col. 2, ll. 56-68). However, it is submitted that the specification and claims do not support this narrow interpretation. The claimed "streams" are not specifically defined in the specification to have any particular configuration (Spec. 4). The specification discloses a hopper with orifices as one particular applicator, but the scope of Claim 1 cannot be interpreted to be

limited solely to this hopper/orifice apparatus (See Claims 1, 4, and 7). Thus, the claimed "streams" appear to be merely unbroken flows of material onto a conveyor, which are met by the Weaver process (Weaver col. 2, ll. 49-68).

With respect to the "top layer", it is submitted that Weaver describes the top coating only to distinguish it from the colored materials applied against the conveyor. It does not appear to be the case that Weaver suggests or requires any particular orientation in installing the material, as suggested by Appellant, and Weaver does not appear to use the phrase "top coating" with respect to any portion of the article once the article has been stripped from the substrate (9). Since the design would be visible from either side, it is therefore it is submitted that the article of Weaver would obviously be capable of installation with either face being visible, and that the ordinary artisan would have found it obvious to perform installation in either orientation.

With respect to the particular language of Claim 1, it is submitted that the claimed limitation "and inverted for use in installations with which is visible from above when installed" pertains merely to an intended use, and that the article of Weaver is capable of being used in the claimed manner. The phrase "inverted *for use*" (emphasis added) in Claim 1, the omission of a clear step of installing, and the fact that the whole phrase follows a "wherein" clause support the Examiner's interpretation. Even if this language is read to require a step of inverting and installing in the claimed manner, since Weaver does not appear to require any particular orientation in installing the disclosed material, and since the design would be visible from both sides of the sheet, installation of the sheet with either face visible would have been obvious.

The Examiner maintains that item 9 in Fig. 1 of Weaver is a conveyor since it conveys the liquid material throughout the process until the end of the process (item 25). The limitation

appears to be defined by the function of conveying, a function which item 9 of Weaver clearly does perform.

Argument B

Appellant argues that if the structure of Weaver were to be laminated as taught in Bartlett with a second vinyl layer, it would be done so that the "top layer" 21 remained a top layer and visible (not embedded in the intermediate layer as proposed in the office action) (App. Br. 4). Fine teaches the use of a scrim, but applying the scrim to cover the layer described as the "top layer" would be inappropriate (App. Br. 5).

Response B

The argument does not appear to dispute the factual teachings of the secondary references which collectively teach applying a reinforcing layer and additional vinyl chloride to a sheet. The argument appears to be directed to an alleged lack of motivation to combine the references since there would be no motivation to destroy the "top coating" of Weaver. However, the Weaver process provides a pattern which extends "through the thickness of the sheet" (Weaver col. 5, line 47 to col. 6, line 2; col. 5, ll. 18-21), suggesting that either surface of the composite sheet provides the desired effect. Additionally, Weaver only refers to the "top coating" with respect to orientation on the substrate or conveyor (9), but does not appear to refer to the "top coating" after stripping the material from the substrate or during installation. Therefore, it is submitted that since either surface of the sheet would display the desired effect, that placement of reinforcement on either surface of the sheet would have been an obvious.

Argument C

Appellant argues “In fact, nozzles or orifices would not work for the intended purpose in Weaver of providing a repeatable marbleized effect as there is no teaching as to how such might be accomplished.” (App. Br. 6). Appellant further argues that liquid cannot be applied as the strips of extruded material as done in Mell since the strips are transferred from one conveyor to another (App. Br. 6-7). Appellant further argues that this would lead to gravity tending to pull the material, and accordingly neither reference suggests application of drips or streams. Additionally, Appellant argues that there is no way to modify Mell with Weaver to create a system from which liquid material could be deposited from a hopper.

Response C

Although Appellant argued previously that “Claim 7-9 can stand or fall with the claims from which they depend for purposes of this response” (11/28/07 Arguments 4), the Brief takes a new position. In doing so, however, Appellant’s summary does not accurately characterize the position set forth in the rejection above. The receptacle (4) of Weaver is equivalent to the claimed hopper, and does provide an orifice depicted in Figs. 2 and 3. Any number of these assemblies may be used in parallel and programmed to operate in synchronized and overlapping patterns, according to Weaver (col. 2, ll. 56-66). The rejection merely notes that Weaver is silent to any express teaching of multiple orifices in the same hopper. Although Appellant’s arguments point to many extraneous aspects of the Mell reference, bodily incorporation of Mell into the Weaver process is not suggested by the rejection. Instead, one viewing Weaver’s suggestion to

use multiple assemblies in parallel and operate in a synchronized pattern and having knowledge of Mell's teaching to use multiple orifices in producing a pattern with multiple streams in parallel would have found it obvious to simply provide multiple orifices in the Weaver receptacle. The Examiner respectfully disagrees with the statement contained in Appellant's brief that "In fact, nozzles or orifices would not work for the intended purpose in Weaver of providing a repeatable marbleized effect as there is no teaching as to how such might be accomplished." (App. Br. 6). The Examiner instead submits that the portion of the device of Weaver depicted in Figs. 2 and 3 in fact constitutes an orifice, and that the claim would be met by simply providing multiple orifices to the receptacle consistent with Weaver's suggestion to provide multiple streams operate in parallel and in a synchronized manner.

Argument D

Appellant argues that the Office Action consistently refers to substrate 9 as the conveyor, but if a substrate is provided on the conveyor it will fill in all of the two height pattern to make a single top surface (App. Br. 9). Appellant would disagree that Suzuki teaches utilizing a conveyor texture for transferring a pattern to a floor covering with at least two heights, and that instead a "dye 18" is used for that purpose (*Id.*). Appellant further argues that the rejection effectively states "one of ordinary skill would have been motivate to make this construction..." and is not the standard for obviousness (App. Br. 9-10).

Response D

Appellant's argument does not accurately characterize the rejection of Claim 14 above. The rejection of Claim 14 does not set forth the position that an additional substrate is provided on the conveyor to *cover* a texture. Instead, one would have found it obvious to merely provide a texture to the substrate (9) already provided by Weaver in order to provide a texture to the resulting article of the Weaver process. There appears to be no dispute that Suzuki and Weaver are analogous, and both references provide similar methods for forming a sheet material. (Suzuki Figs. 45-47). Suzuki merely demonstrates that such textures are desirable and known in the art, and therefore it is unclear why one practicing the Weaver method and having knowledge of the desirable benefits provided by the Suzuki process would have found it nonobvious to provide these same benefits to the Weaver article.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Matthew J. Daniels /Matthew J. Daniels/

Conferees:

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Supervisory Patent Examiner, Art Unit 1791

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/Jennifer Michener/

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